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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,016	10/09/2003	Arthur Richard Metcalf	MIC-45 (P50-0109)	7745
34043	7590	02/28/2006	EXAMINER	
DORITY & MANNING, PA & MICHELIN NORTH AMERICA, INC			POPE, DARYL C	
P O BOX 1449			ART UNIT	PAPER NUMBER
GREENVILLE, SC 29602-1449			2632	

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/682,016

Applicant(s)

METCALF ET AL.

Examiner

DARYL C. POPE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/14/04; 10/9/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

ART REJECTION:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2,6-7,9-11,16-17, and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kulka et al(6,087,930).

-- In considering claims 1-2,6,10-11 and 16, the claimed subject matter that is met by Kulka et al(Kulka) includes:

1) the mounting patch is met by the transponder(10);
2) the power source is met by the battery(14);
3) the at least one electronic device supported by the substrate and configured to receive energy from the power source is met by the RFID(18) which is mounted on the substrate(12) and connected to the battery(14) by conductive tracings(see: column 5, lines 12-19).

-- With regards to claims 7 and 17, the plurality of flexible conductive elements are met by the conductive tracings which are formed in the substrate(see: column 5, lines 8-11) which would have been required to be flexible, since the substrate is flexible to enable conformance the shape of the tire(see: column 4, lines 47-52).

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-- With regards to claim 9, the electronic device being an RFID transponder is met by the RFID (18) of transponder(10).

-- With regards to claim 19, the device being a sensor is met by the temperature sensor of the RFID(18, column 5, lines 34-38).

-- With regards to claim 20, the data transmitter is met by the transmitters(30-32).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-5,8,12-15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kulka et al(Kulka).

-- With regards to claims 3 and 13, although use of a single battery is taught by Kulka, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate substitute a pair of batteries in place of the one battery of Kulka, as desired, since use of a pair of batteries would have provided redundancy and as well increased power which would have ensured adequate power for the devices of the transponder.

-- With regards to claims 4-5,12, and 14-15 the examiner takes official notice that use of adhesive bonding layers, and as well hook and loop tape combination for mounting are well known, and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate either of the above stated means

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into the system of Kulka for the purpose of securing the electronic device to the mounting patch, since either of the securing means would have provided inexpensive and reliable means for securing devices in a volatile environment such as a tire inner liner.

-- With regards to claims 8 and 18, it would have also been obvious to one of ordinary skill in the art at the time the invention was made to incorporate flexible conductive elements selected from any of springs, fatigue resistant metals, or elastomers, since these would have also provided reliable substances for use in the volatile environment of the tire inner liner, so as to ensure the integrity of elements for providing power to the device.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARYL C. POPE whose telephone number is 571-272-2959. The examiner can normally be reached on M-TH 9:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DANIEL J. WU can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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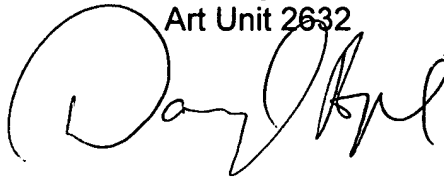
you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Daryl C. Pope

Feb. 5, 2006

DARYL C POPE
Primary Examiner
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A handwritten signature in black ink, appearing to read "Daryl C. Pope", is written over the printed name and title.